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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,150

07/13/2006

Daniel Willem Elisabeth Schobben

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

FAULK, DEVONA E

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

04/01/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,150	Applicant(s) SCHOBEN ET AL.	
	Examiner DEVONA E. FAULK	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8,10-12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-8,10-12 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/13/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remarks

1. The indicated allowability of claims 13-15 is withdrawn in view of the newly discovered reference(s) to Arnold. Rejections based on the newly cited reference(s) follow.
2. Claims 2,3,9 and 13 are cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,4-8,10-12,14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klayman (US 5,784,468) in view of Taylor (US 4,778,027) in further view of Arnold et al. (US 6,154,549).

Regarding claim 1, Klayman discloses a device having a first and a second sound-generating means (Figures 1 and 2; speaker assemblies 100 and 140), and an input for a stereo signal (Figure 1; column 4, lines 29-40) comprising left and right sound signals (Figures 1 and 2), and wherein the device has an interconnected first and second part comprising the first and second sound generating means (Figures 1 and 2; each speaker assembly includes a first and second sound generating means) , respectively, and wherein the device has means for sending a first signal which is a composite of the

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left and right sound signals, to the first sound- generating means of the first part), and a second signal, which is a different composite of the left and right sound signals, to the second sound-generating means of the second part (Figures 1 and 2; column 4, lines 44-49-63).

Klayman teaches of coupling sound waves (Figures 1-4). Klayman fails to teach of coupling sound waves generated by the first sound-generating means into a surface when placed upon said surface. Taylor teaches of coupling sound waves generated by a first sound-generating means into a surface when placed upon said surface (Figures 8 and 9; column 3, lines 60-column 4, line 20; column 4, line 61- column 5, line 2). It would have been obvious to modify Klayman so that the first sound generating means couples sound waves into a surface when placed upon said surface for the benefit of providing a better "feel" of the sound or music to the user.

Klayman as modified fails to disclose wherein responsive to the co-vibrating of the first sound-generating means and the surface, a sound volume produced by said first part at a distance of one meter from said first part is increased by at least 6 dB as compared to the same part when used in air.

Arnold discloses that is also possible for a source to be resting on a hard, sound-reflecting surface and radiating hemispherical waves. Under those conditions, the sound intensity level $L_{sub.I}$ and the sound pressure $L_{sub.p}$ at a distance of one meter are 8 dB less than the sound power level, once again diminishing by 6 dB each time the

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distance is doubled. In actual practice, few sound sources radiate sound equally in all directions, and there are often reflecting surfaces nearby that destroy the symmetry of the spherical or hemispherical waves (column 7, line 62-column 8, line 3).

Based on Arnold's teaching, the examiner asserts that it is a matter of design choice as to how the sound volume will be produced. Therefore, it would have been obvious to modify Klayman so that the sound volume is produced as claimed for the benefit of producing a specific desired output.

Regarding claim 6, Klayman as modified discloses wherein the first part comprises a coupling means (Klayman, Figures 1 and 2).

Regarding claim 4, the examiner asserts that using orthogonal signals for driving sound generating means in a sound system is well known in the art. It would have been obvious to modify Klayman as modified so that the means for sending are arranged in such a way that the signals are orthogonal signals so that a better sound field can be created.

Regarding claim 5, Klayman as modified discloses wherein the means for sending are arranged in such a way that the first signal comprises a difference signal of left and right stereo signals and the second signal comprises a sum signal of the left and right stereo signals (See Klayman as applied above to the rejection of claim 1)..

Regarding claims 7-8, Klayman as modified teaches of the speakers mounted in a speaker assembly (Klayman, Figures 1 and 2) . The various coupling techniques of a suction element, a magnet and reversible coupling means are all well known in the art. To use one type of coupling means over another is just a matter of substitution. It would have been obvious to modify Klayman as modified so that the coupling means is a suction element, a magnet or reversible coupling for the benefit or using an alternative method of coupling.

Regarding claim 10, the examiner takes official notice that piezoelectric speakers are well known in the art. It would have been obvious to modify Klayman as modified so that the speakers are piezoelectric type speakers for the benefit of having a speaker system more resistant to overload.

All elements of claims 11,12,17,18,20 are comprehended by the rejection of claims 1,4 and 5 (The examiner asserts that the L+R signal reads on the dominant language and the L-R signal reads on the residual language; See Klayman Figure 2).

Regarding claim 16, the examiner asserts that a sound generating means that is positioned on a swivel is well known in the art. It would have been obvious to modify Klayman as modified to have a sound generating means positioned on a swivel for the benefit of providing flexibility.

All elements of claims 14 and 15 are comprehended by the rejection of claim 1.

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Regarding claim 19, the examiner asserts that reverse coupling is well known in the art. It would have been obvious to modify Klayman as modified to use reversible coupling for the benefit of having flexible coupling.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/
Primary Examiner, Art Unit 2614